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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,369	09/30/2003	Kazuhiro Ishiguchi	243176US2	4331
22850	7590	04/13/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			LIVEDALEN, BRIAN J	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary	Application No. 10/673,369	Applicant(s) ISHIGUCHI, KAZUHIRO	
	Examiner Brian J. Livedalen	Art Unit 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 6 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to amendment filed 3/16/2006. Claims 1-3, 5, 6, and 11 are still pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaines et al. (6998594) in view of Konagaya (6960759).

In regard to claim 1, Gaines discloses (fig. 1) a light source unit (100) including a light source having a plurality of light source elements (150) for emitting different wavelengths of light; a light mixer (fig. 3, 320) for mixing light emitted by the plurality of light source elements (column 3, lines 2-10); a light detector (110) for detecting light for the light mixer capable of detecting a plurality of different wavelengths of light; and a light source control means (130) for controlling luminance of each of the plurality of light source elements based on values detected by the light detector so that the light source unit has substantially constant chromaticity (column 4, lines 6-29). Gaines discloses a temperature sensor (120) and attempts to maintain a constant temperature (column 4, lines 30-38), but fails to disclose a temperature control means that keeps the source at constant temperature. However, Konagaya discloses (fig. 6) a temperature control means (70) that is used to keep the temperature of the source constant (column 2, lines

30-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a control means to keep the temperature constant in order to more effectively maintain the temperature in order to increase the stability of the light source as taught by Konagaya (column 13, lines 40, 41).

In regard to claim 2, Gains discloses the light source control means controls luminance of each of the plurality of light source elements so that each detected value in the wavelength range approaches a given value (column 4, lines 6-29).

In regard to claim 3, Gains further discloses a temperature detector (120) for detecting temperature of the light source, and Konagaya discloses that the temperature controller operates so that a value detected by the temperature detector approaches a given value (column 2, lines 30-41).

In regard to claim 5, Gains further discloses a temperature detector (120) for detecting temperature of the light source and Konagaya discloses a that the temperature controller (36) changes a temperature value to be maintained in the light source based on a temperature value detected by the detector (column 2, lines 30-41), and Gaines further discloses that the light source controller controls the light source elements to have luminance corresponding to the temperature to be maintained (column 4, lines 30-38).

In regard to claim 6, Gaines discloses (fig. 1) that the light source has a plurality of light source elements emitting light with wavelengths corresponding to each of N number of colors (column 2, lines 36-38); and a light detector comprising N number of optical sensors corresponding to each of N number of colors (column 5, lines 4-6); and

the light source control means controls each of the plurality of light source elements so that each value detected by the N number of optical sensors approaches each given value (Gaines, column 4, lines 19-29).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaines et al. (6998594) in view of Konagaya (6960759) in further view of Rand et al. (US 6521879).

In regard to claim 11, Gaines discloses (fig. 1) a light source unit (100) including a light source having a plurality of light source elements (150) for emitting different wavelengths of light; a light mixer (fig. 3, 320) for mixing light emitted by the plurality of light source elements (column 3, lines 2-10); a light detector (110) for detecting light for the light mixer capable of detecting a plurality of different wavelengths of light; and a light source control means (130) for controlling luminance of each of the plurality of light source elements based on values detected by the light detector so that the light source unit has substantially constant chromaticity (column 4, lines 6-29). Gaines discloses a temperature sensor (120) and attempts to maintain a constant temperature (column 4, lines 30-38), but fails to disclose a temperature control means that keeps the source at constant temperature. However, Konagaya discloses (fig. 6) a temperature control means (70) that is used to keep the temperature of the source constant (column 2, lines 30-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a control means to keep the temperature constant in order to more effectively maintain the temperature and reduce the effects of a varying

temperature. Gaines in view of Konagaya is silent regarding the specific utility of the light source unit. However, Rand teaches that a light source unit that emits different wavelengths of light using LEDs and optical feedback is used for the light source of a flat panel display for displaying images by controlling the light source (Field of the Invention). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention of Gaines in view of Konagaya as a light source for a flat panel display in order to project images rather than white light.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5, 6, and 11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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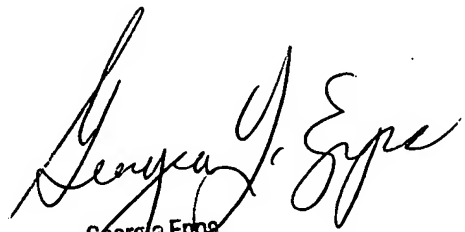
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Livedalen whose telephone number is (571) 272-2715. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bjl


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